

Comment

MASTER IN SCIENCE COMMUNICATION: AN OVERVIEW

MSc Science Communication, Science Communication Unit, UWE, Bristol

C. Wilkinson, K. Bultitude, E. Weitkamp

ABSTRACT: The MSc in Science Communication offered by the University of the West of England is taught in short three day blocks, designed specifically to cater for both full and part time students wishing to combine work and study effectively. Started in 2004, the programme emphasises the development of practical skills as well as developing a wider understanding of the key issues facing science communicators today. With this in mind, workshops explore theory and practice, considering the potential of a range of creative, targeted and innovative opportunities to enable greater community participation in scientific issues.

The MSc Science Communication based at the Science Communication Unit, University of the West of England, Bristol, began in January 2004 and has recruited over 75 students to date. The ethos of the Science Communication Unit at UWE underpins the MSc programme, which focuses on targeted, innovative and creative approaches to science communication. This approach has been particularly appealing to international students who typically represent 25-30 per cent of the total cohort; previous students have come from countries such as Germany, Greece, Iceland, Portugal, Singapore and the USA.

The MSc is delivered via two compulsory and four optional 30-credit modules, along with a final 60-credit project. The programme is designed to facilitate part time study, and allows students to combine full time work and study effectively. Taught sessions are delivered on a three-day block basis (Thursday – Saturday) in order to minimise the amount of time part-time students spend away from their jobs. Hence for each module a student visits campus for a total of nine full days across the year. External to the blocks students participate in formative assessments, often of a group nature to encourage peer contact. Independent research and e-learning are encouraged and an online portal ensures students living outside Bristol can maintain high levels of contact with the programme.

The innovative mode of delivery particularly seeks to support ‘voluntary’ adult learners¹ and as such draws students who are often already working professionally in science communication. The flexibility of the approach means that the programme also attracts full time students. The UWE MSc is appropriate for those wishing to supplement the course with part-time work, placements or voluntary work in the sector, with Bristol ideally located for a range of innovative science communication opportunities such as the BBC’s Natural History Unit, At-Bristol and a plethora of media production and science communication agencies.

The teaching methods used on the course include lectures, workshops, presentations and field trips and are facilitated by an interdisciplinary staff team (natural and social sciences) whose expertise span both academia and professional practice. This internal expertise is supplemented by Visiting Lecturers from a wide-range of organisations such as The British Science Association, the Royal Society, Ecsite-UK, the BBC and the Wellcome Trust; the existing partnerships developed by the Science Communication Unit at UWE across the sector have proven particularly beneficial here.

The emphasis of the MSc Science Communication at UWE is tailored more to the practical than the theoretical. The Unit strives to train students to be active, reflective, responsive communicators and does not see the role of the science communicator as one simply to translate or disseminate scientific information.² Students cover a compulsory theoretical grounding in the module *Science and Society*, which explores shifts from traditional approaches to scientific literacy and public understanding to

engagement and participation models. In *Science and Society* students are encouraged to consider the implications of changes in the relationships between science and society and the practical ramifications this can then have for science communicators seeking to communicate controversial, complex and uncertain science. This is then followed in the optional modules by a considerable emphasis on the practical with students encouraged to build a portfolio of work in areas such as science writing, broadcasting or direct science communication media.

Optional modules currently offered include *Writing Science*, *Broadcasting Science* and *Science Direct in Practice*. A recently introduced module, *New Opportunities in Science Communication* is particularly illustrative of the practical focus in addition to the responsive and forward-facing qualities of the MSc. The module encourages students to consider fresh formats for communication, differing cultural contexts and novel audiences exploring techniques such as Sci-Art, podcasting and grassroots journalism. The final project module provides students with a further opportunity to partake in a project specific to their science communication interests or to work with an external organisation such as a science centre, production company or learned institution.

In 2006 we took the opportunity to survey our existing students and graduates. 32 students participated in the survey, a response rate of 63 per cent based on graduate figures at that time. Of those students half were living in Bristol during semester, with the remaining students commuting from across the UK and Europe for teaching blocks. 60% (n=19) of students had completed undergraduate degrees since 2000, with nine of these entering postgraduate study straight from an undergraduate degree. 25% (n=8) were already working full-time in a science communication or communication field, and four students were PhD students or Post-Docs. During the course at least 15 students took up jobs in the science communication field, with 53% (n=17) working full-time whilst being enrolled on the course, and 25% (n=8) working part-time. From this survey we know that the biggest attraction to our students is the modules (n=31) the Science Communication Unit offer, closely followed by the practical aspects (n=28) of the course and the academic staff (n=25). The style of teaching in three day blocks remains popular with students; qualitative feedback established that students believe it helps them to gain focus, concentrate, to bond as a group and to maintain a good work-life balance.

The MSc Science Communication remains successful in attracting 15-20 students per year from a broad range of academic perspectives, a variety of levels of experience and a number of different countries. Following the course our students take up positions with a range of employers including science centres, universities, media organisations, and publishers. A number have also launched freelance careers whilst participating in the course.

The Science Communication Unit is also keen to engage with would-be science communicators that do not have the financial or time commitment for a postgraduate course. To that end the Unit offers both an annual Science Communication Masterclass and a bespoke training portfolio for organisations seeking tailored training. These training opportunities build upon the course structure and content of the Masters programme. Further information on the MSc Science Communication, Science Communication Masterclass and bespoke training portfolio can all be found at the Science Communication Unit website <http://scu.uwe.ac.uk/>

Notes and references

¹ A. Fuller (2001), *Credentialism, adults and part-time higher education in the United Kingdom: An account of rising take up and some implications for policy*, *J Educational Policy*, 16 (3), 233-248.

L. Knox (2000), *The shock of the new: students perception of a collaborative degree*, *Innovations in Education and Training International*, 37(2), 87-96.

² N. Pitrelli (2008), *Science and society: a dialogue without communicators?* *Jcom* 07(01), C1.

Authors

Clare Wilkinson is a Senior Lecturer in Science Communication and Admissions Tutor for the MSc Science Communication at the University of the West of England, Bristol. Clare is a sociologist and has

been involved in a variety of projects investigating public engagement with areas of science including robotics, nanotechnologies and new genetics. She is currently co-authoring a book on nanotechnologies, risk and communication and has published work in a range of academic journals.

E-mail: clare.wilkinson@uwe.ac.uk.

Karen Bultitude is a Senior Lecturer in Science Communication at the University of the West of England, Bristol. She specialises in innovative and practical methods of taking science directly to public audiences, both within the UK and internationally. Karen is an EPSRC Public Engagement Mentor and in 2008 was awarded the Joshua Phillips Memorial Prize for Innovation in Science Engagement.

E-mail: karen.bultitude@uwe.ac.uk.

Emma Weitkamp is Programme Leader and Senior Lecturer in Science Communication at the University of the West of England, Bristol. She specialises in science writing, with current research including the management of the 'Science for Environment Policy' news alert service for DG Environment and the creation of a series of chemistry comics, aimed at Key Stage 2 children and their teachers.

E-mail: emma.weitkamp@uwe.ac.uk.

HOW TO CITE: C. Wilkinson, K. Bultitude and E. Weitkamp, *MSc Science Communication, Science Communication Unit, UWE, Bristol, Jcom* **08**(01) (2009) C07